

Before
The Public Service Commission
of
South Carolina

Docket No. 2014-13-A
(Year 2014 - 2015 Proceeding)

DIRECT TESTIMONY
of
MICHAEL J. BENJAMIN
for
Chem-Nuclear Systems, LLC

Q. PLEASE STATE YOUR NAME, POSITION AND BUSINESS ADDRESS.

A. My name is Michael J. Benjamin. My business address is 740 Osborn Road, Barnwell, South Carolina. I am employed by Chem-Nuclear Systems, LLC (CNS), a wholly-owned subsidiary of Duratek, Inc which is, in turn, a wholly-owned subsidiary of EnergySolutions, LLC. As Director, Barnwell Operations, I am responsible for the safe and proper disposal of low level radioactive waste received at the disposal facility in accordance with the company's South Carolina Radioactive Material License. I am also responsible for management, supervision and administration of disposal operations personnel, equipment and buildings.

Q. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL EXPERIENCE.

A. I have an Associate's Degree in Nuclear Technology from Trident Technical College, Charleston, SC. I am a Registered Radiation Protection Technologist through the National Registry of Radiation Protection Technologists. I have over 35 years of experience managing and disposing of low-level radioactive waste. I have been employed with CNS since 1980 in various positions starting as Health Physics Supervisor, then Radiation Safety Officer, and my present position, which I began in November of 2011.

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY BEFORE THE PUBLIC SERVICE COMMISSION?

A. Yes. I testified before the Public Service Commission two years ago.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My testimony will provide information to the Commission about the disposal site and facility operations as those matters relate to disposal of low level radioactive waste at the disposal facility located in Barnwell County, South Carolina. I will provide a brief

background on the general process we have used in this proceeding for identifying the allowable costs associated with our low level radioactive waste disposal business. I have included an Amended Application for identification of allowable costs as an exhibit to my testimony. My testimony will be based on the Amended Application we submitted March 5, 2015. The Amended Application reflects the agreements we reached with the Office of Regulatory Staff (ORS) during their annual audit of our allowable costs.

My testimony will also focus on the principal differences in categories of costs between costs we actually incurred in Fiscal Year 2013-2014 and the estimated costs identified in Commission Order 2014-451. Finally, my testimony will summarize the costs we are requesting the Commission to identify as allowable for Fiscal Year 2014-2015.

Q. PLEASE DESCRIBE THE DISPOSAL SITE.

- A.** Chem-Nuclear (CNS) operates a low level radioactive waste (LLRW) disposal facility located approximately five miles west of the City of Barnwell in Barnwell County, South Carolina. The closest municipality to the disposal site is the Town of Snelling. CNS has operated the disposal site since 1971 continuously with no interruptions or regulatory shutdowns. We are proud of our exemplary safety record.

The disposal site comprises approximately 235 acres of property owned by the State of South Carolina and leased by CNS from the South Carolina Budget and Control Board (SC B&CB). The 235-acre licensed disposal area is divided into different use categories including active trenches, completed trenches, potential trench areas, and ancillary facility, water management and buffer zone areas. Approximately 120 of the 235 acres are completed trenches with enhanced (multi-layer or geo-textile) caps installed.

The disposal site could not be operated successfully without an experienced and talented group of employees. They are critically important to the safe and compliant operation of the disposal site. Many of CNS' employees at the disposal site have been with the company for twenty years or more. Attracting and retaining high quality, well-motivated personnel is an integral part of successful, safe and regulatory compliant disposal of LLRW.

Q. PLEASE DESCRIBE THE DISPOSAL SITE OPERATIONS IN FISCAL YEAR 2013-2014, INCLUDING CHANGES FROM PREVIOUS YEARS' OPERATIONS.

- A. We continue to operate as an in-compact disposal site, accepting waste from the Atlantic Compact states of South Carolina, New Jersey, and Connecticut only.

Q. PLEASE DESCRIBE BRIEFLY THE STATUTORY AND REGULATORY BACKGROUND FOR CHEM-NUCLEAR'S APPLICATION THAT IS THE SUBJECT OF THIS HEARING.

- A. This is the fourteenth hearing conducted by the Commission in this docket to fulfill its responsibilities under the "Atlantic Interstate Low level Radioactive Waste Compact Implementation Act" of 2000. As required by the Act, the Commission has held formal proceedings annually and published orders after hearings in this docket by which the Commission has identified Chem-Nuclear's "allowable costs". By that determination, as provided by the Act, Chem-Nuclear is able to recover costs it incurs for operations in the disposal of low level radioactive waste at its Barnwell site.

Over the previous thirteen hearings, and, as the Commission's orders demonstrate, the Commission has relied on the evidence to make numerous determinations with respect to which of our costs are to be properly considered as "allowable," and the Commission has consistently refined its decisions on the issues. As a consequence, many

of the issues that the parties and the Commission addressed in previous proceedings have been resolved and the orders represent the precedents upon which we have relied in preparing our Amended Application and evidence in this case.

Q. PLEASE EXPLAIN THE GENERAL CONCEPT THAT CHEM-NUCLEAR'S APPLICATION AND EVIDENCE EMBODY IN THIS PROCEEDING.

- A. Our Amended Application and our evidence in this case represent a similar approach to what I understand was used in previous proceedings. That approach incorporates the separation of costs into the three categories that were identified in the Collaborative Review of Chem-Nuclear's Operations and Efficiency Plan that the Commission approved and which the Commission has directed Chem-Nuclear to use by previous orders in this Docket. Those three categories are fixed costs, variable costs and irregular costs. Our Amended Application and evidence for Fiscal Year 2013-2014 also reflect the full use of the accounting system the Commission approved in Order 2011-388. That accounting system enables us to capture and track the separated costs as we incur them and incorporate the data effectively in our internal monthly data reports and in our exhibits to the Amended Application and our evidence.

The actual data collected in the three cost categories for Fiscal Year 2013-2014 provide information to adjust the projected costs the Commission identified as allowable in Commission Order 2014-451 to reflect actual operations experience.

Q. PLEASE EXPLAIN THE DIFFERENCES BETWEEN CHEM-NUCLEAR'S ORIGINAL APPLICATION AND THE AMENDED APPLICATION PROVIDED AS AN EXHIBIT TO YOUR TESTIMONY.

- A. There were adjustments made by the Office of Regulatory Staff (ORS) to the calculation of Vault Costs and Irregular Costs that we agreed with, but the adjustments did not cause our

actual costs incurred in Vault and Irregular Costs to be more than the amount identified in Commission Order No. 2014-451. Therefore, we are not requesting an adjustment in Vault and Irregular Costs. The Vault and Irregular Costs parts of Amended Exhibit A show the adjustments recommended by the ORS and agreed to by us. Amended Exhibit B also reflects the results of the ORS audit of Irregular Costs.

The principal differences between the Original Application and Amended Application were in the Fixed Costs and Variable Costs for Fiscal Year 2013-2014. Actual Fixed Costs for Fiscal Year 2013-2014 identified in the Original Application were \$3,375,112.48, and the Company requested an adjustment of \$55,380.48. Actual Fixed Costs for Fiscal Year 2013-2014 identified in the Amended Application are \$3,387,465.87, and the Company is requesting an adjustment of \$67,733.87.

The Fixed Cost adjustments made by the ORS as a result of the audit involved re-classing costs by deducting them from Non-Labor and adding them to the correct Fixed Cost category. There are two adjustments recommended that increased Non-Labor and decreased two components of Fixed Costs.

The Company's Original Application included an adjustment of \$65,281.11 under Variable Costs: Variable Labor and Non-Labor Costs, a category of Fixed Costs. This adjustment was increased to \$67,662.75 in the Amended Application. In the Original Application, Chem-Nuclear used 46 units instead of 44 units for ABC Waste Disposal at a rate of \$1,190.82 per unit. The use of 46 units resulted in a Total Calculated Variable Labor and Non-labor Cost (using the Variable Cost Rates in Commission Order No. 2014-451) of \$166,861.03. The Original Application and exhibit requested an adjustment of \$65,281.11, or the difference between actual \$232,142.14 and calculated \$166,861.03. In the Amended

Application and exhibit, Chem-Nuclear corrected the number of units to 44, which changed the Total Calculated Variable Labor and Non-labor Cost to \$164,479.39.

The Company identified actual Irregular Costs of \$216,435 in their Original Application. During their annual audit, the ORS determined that the total Irregular Costs incurred in Fiscal Year 2013-2014 were \$225,550. In the Original Application, Site Cleanup in the amount of \$9,115.19 was omitted from Irregular Costs (Site Maintenance). Based on support documents provided, the ORS found that \$1,163.29 should be included as labor and fringe and \$7,951.90 should be included as non-labor. The inclusion of this omission changes Site Maintenance to \$104,218 and changes the total Irregular Costs for Fiscal Year 2013-2014 to \$225,550 as shown in the Amended Application and amended exhibit. In our Amended Application, the Company accepted the Site Maintenance cost adjustments made by the ORS, and the Amended Application reflects total Irregular Costs of \$225,550. This amount is under the amount reflected in Commission Order No. 2014-451, therefore, no adjustment in Irregular Costs is requested. Amended Exhibit B of the Amended Application also reflects the Irregular Costs Site Maintenance cost adjustments.

There are no changes to the proposed costs for Fiscal Year 2014-2015 in the Amended Application; therefore, there are no changes to Exhibit C.

Q. PLEASE DESCRIBE THE MANNER IN WHICH CHEM-NUCLEAR TREATS “ALLOWABLE COSTS” UNDER THE REGULATORY PROCESS ESTABLISHED BY THE ACT?

- A.** Chem-Nuclear’s method for seeking adjustments to the costs identified by the Commission in its orders is different from the regulatory treatment of other regulated entities. First of all, the Act does not provide for the Commission to determine our revenue requirements, including rate of return, based on a test year, and fix our rates or charges to enable Chem-

Nuclear to recover its revenue requirements. The Act empowers the Commission to identify our “allowable costs,” and we deduct this total (including a statutory margin applied on some costs) from the annual amount paid to the State.

At the end of each fiscal year, we compare the costs we actually incur to operate the site to the costs previously identified as allowable in the Commission’s order for that year. We only use the actual costs incurred as the amount that we request the Commission to identify as allowable in the following proceeding. That means that if we do not actually spend as much as the Commission has allowed for a particular cost category, then we only use the actual amount spent in determining the allowable cost for Chem-Nuclear at the end of the year. If we were to spend more than the identified amount, we apply to the Commission to recover the extra cost in the subsequent fiscal year. Chem-Nuclear sometimes carries costs for a year or more until the Commission rules on our Application to recover them.

Q. PLEASE EXPLAIN HOW THE PROCESS WORKS BY USE OF AN EXAMPLE?

A. Vault cost recovery is a good illustration of the method. Each year the Commission determines variable vault cost rates for standard disposal vaults that are dependent on the number of cubic feet of waste in four classifications received at the site (Class A, Class B, Class C, and Slit Trench waste). That “variable vault cost rate” can be used to forecast the vault costs in the next year, based on the volume of waste received in each category. However, it is difficult to predict accurately by waste classification the volume and mix of waste that will be received in any given year. Therefore, the variable vault cost rate will sometimes forecast a dollar amount for vault costs that is in excess of the actual amount spent. In such cases, the actual amount spent to procure concrete disposal vaults is used to determine Chem-Nuclear’s cost recovery and fee, not the higher amount forecast by the

variable vault cost rate. If the situation were reversed, that is, if the vault costs exceeded the level previously identified by the Commission, Chem-Nuclear would seek to recover the additional amount that we actually spent as part of the application for allowable cost recovery for the subsequent fiscal year in the next year's Commission proceeding.

Q. PLEASE EXPLAIN HOW THE ALLOWABLE PORTION OF CORPORATE GENERAL AND ADMINISTRATIVE (G&A) COSTS IS DETERMINED.

- A. There are three components to the Corporate G&A Costs identified in our application. These components and their respective allocation methods are: Corporate SG&A (total cost basis), Corporate Information Systems (IS) allocation (based on a "head count" or the number of employees assigned to each business unit), and Columbia SG&A allocation (based on the number of disposal site personnel located in the company's Columbia, SC offices). The Office of Regulatory Staff again conducted a detailed audit of the pool of costs that formed the basis for CNS' G&A allocation to identify costs that were allowable and costs that were unallowable under the statute.

Q. WHAT ALLOWABLE COSTS ARE INCLUDED IN G&A?

- A. Corporate SG&A costs are allocated to each business unit on a total cost basis. The pool of costs that forms the basis for the Corporate SG&A Allocation includes costs for Corporate Executive Management and Support, Contracts and Finance, Contracts Legal Support, Human Resources Corporate Support, Accounting Corporate Support, and Regulatory Affairs and Environmental, Safety, Health, Quality Assurance, and Security Corporate Support.

The Corporate IS costs are allocated based on the "head count" or number of employees assigned to each business unit. Columbia SG&A costs are allocated to business units based on the number of each respective business unit's employees located in the

company's Columbia, SC office. The total allowable Corporate G&A allocation for Fiscal Year 2013-2014, after adjustments made in the ORS audit, is \$623,872.77.

Q. PLEASE DESCRIBE THE ALLOWABLE COSTS INCURRED IN FISCAL YEAR 2013-2014 AND COMPARE THOSE COSTS TO THE AMOUNTS IDENTIFIED IN COMMISSION ORDER 2014-451.

- A. This part of my testimony will focus on the principal differences in categories of costs between actual costs incurred in Fiscal Year 2013-2014 and the costs identified in Commission Order No. 2014-451. We are requesting adjustments to the Fixed Costs and Variable Costs (Variable Labor and Non-Labor Costs) incurred in Fiscal Year 2013-2014.

Fixed Costs

Actual Fixed Costs incurred in Fiscal Year 2013-2014 were \$67,733.87 more than the Fixed Costs identified in Commission Order No. 2014-451. This is primarily due to the re-classing of costs that decreased costs in Non-labor and increased costs in the Corporate Allocation, Equipment leases and support, and Depreciation. In Insurance costs, \$19,255.80 was removed and added to Non-labor. An adjustment was made to remove Severance costs from Non-labor, but the costs were actually included in Labor. As a result of the Audit, the ORS removed the \$65,196 cost from Labor and added it back to Non-Labor. The Severance was then re-classed to Irregular Costs, and the ORS agreed with this change. Chem-Nuclear requests an adjustment of \$67,733.87 in Fixed Costs as shown on Amended Exhibit A.

Variable Costs

Variable Costs consist of two parts. I will discuss Variable Labor and Non-Labor Costs and then Variable Material Costs for the concrete disposal vaults (Variable Vault Costs).

Variable Labor and Non-Labor Costs

The actual Variable Labor and Non-Labor costs experienced in the disposal of waste in Fiscal Year 2013-2014 resulted in a Total Variable Labor and Non-Labor Cost of \$232,142.14. The actual Variable Labor and Non-labor costs experienced in Fiscal Year 2013-2014 is \$67,662.75 more than the amount that would have been anticipated based on rates provided in Commission Order No. 2014-451. Chem-Nuclear requests an adjustment in this category of costs of \$67,662.75.

Variable Material (Vault) Costs

The amount of actual Variable Material (Vault) Costs incurred in Fiscal Year 2013-2014 for standard disposal vaults were \$196,269.71 less than the amount calculated using rates identified in Commission Order No. 2014-451. Therefore, Chem-Nuclear requests no adjustment in this category of costs.

Irregular Costs

Not all Irregular Costs for the year are known at the time a Commission order is issued. Irregular Costs are costs incurred for projects that may not occur each year or projects that occur each year but with varying costs. Each year Irregular Cost projects with varying costs include trench construction, site engineering and drawing updates, and other site construction projects. Examples of projects that may not recur each year are irregular component disposal, site assessments and license renewal proceedings and hearings. Total Irregular Costs incurred for Fiscal Year 2013-2014 were \$225,550 compared to the amount identified in Commission Order No. 2014-451 of \$233,250. Chem-Nuclear is requesting no adjustment in Irregular Costs.

Q. PLEASE DESCRIBE THE COSTS PROPOSED FOR FISCAL YEAR 2014-2015.

- A.** The costs proposed for Fiscal Year 2014-2015 are summarized in Exhibit C. Disposal operations in Fiscal Year 2014-2015 will continue to reflect smaller routine volume disposal site operations because the disposal site will continue to accept only waste from the three Atlantic Compact states.

Proposed Fixed Costs

The Fixed Labor costs (labor and fringe costs) proposed for Fiscal Year 2014-2015 and non-labor fixed costs proposed are based on actual fixed labor costs incurred in Fiscal Year 2013-2014 as shown in the Amended Application. Insurance costs proposed for Fiscal Year 2014-2015 are based on costs incurred during the first six months of the year projected forward to the anticipated insurance premium costs for the year.

Legal expenses are anticipated to be continuing because of the license renewal appeal process and other legal matters.

Total fixed costs proposed for Fiscal Year 2014-2015 are \$3,685,110.24.

Proposed Irregular Costs

As discussed earlier, not all irregular costs were known at the time the application was submitted. The Irregular Costs identified in Exhibit C are based on costs incurred during the first half of Fiscal Year 2014-2015 and activities expected in the second half of the Fiscal Year. A total of \$308,000 in various irregular project costs is summarized in Exhibit C to our application.

The two largest expenditures in Irregular Costs are Trench Construction and License Appeal. We extend Trench 99 150 feet at a time, and in Fiscal Year 2014-2015 we will extend Trench 99 for the fourth time at an anticipated cost of \$100,000. The remaining \$50,000 is for normal trench maintenance. With regard to the License Appeal

projected costs of \$100,000, the appeal of our 097 license to operate the disposal site is ongoing, and we have already incurred costs for Fiscal Year 2014-2015. Currently we are waiting to hear from the South Carolina Court of Appeals, and we expect to incur additional costs for the remainder of the fiscal year.

We are proposing \$5,000 for Trench Records Software maintenance. This software has been used at the disposal site for a very long time, and periodically the software needs routine maintenance to continue providing the records we are required to keep.

The buildings that are part of the disposal site are aging and in need of repairs and upkeep. For Fiscal Year 2014-2015 we propose spending \$50,000 for Site Maintenance repairs and upkeep such as replacing carpet, painting, as well as several planned and emergency plumbing and electrical projects.

Proposed Variable Labor and Non-Labor Cost Rates

The variable labor and non-labor cost rates proposed for Fiscal Year 2014-2015 are based on rates identified in Commission Order 2014-451 with no nominal inflation rate added.

Proposed Variable Material (Vault) Cost Rates

The vault cost rates provided in Exhibit C are based on rates identified in Commission Order 2014-451 with no nominal inflation rate.

Q. DOES THAT CONCLUDE YOUR DIRECT TESTIMONY?

A. Yes it does.